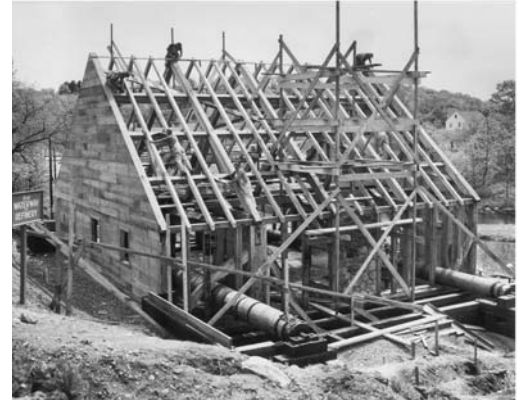


Words of an Industrial First

Iron making in the 17th century was very technical. Many of the words they used and understood are not part of our vocabulary today. Use the words and definitions below to help you better understand the story of this site.



ANVIL: An iron block used by blacksmiths. Here they hammered and shaped iron.

APPRENTICE: A person who trains under a master to learn a trade or skill.

ARTIFACT: A man-made object created for a specific purpose during a specific time period.

BELLOWS: A machine that forces air into a fire. This allows the fire to burn hotter.

BLACKSMITH: A person who shapes iron into various objects and tools.

BLAST FURNACE: A place where raw materials (charcoal, bog iron ore, and gabbro) are melted to produce cast (or pig) iron.

BOG: A poorly drained area with a wet spongy ground.

BOG ORE: Iron ore, found in a bog, that has been produced by both biological and chemical reactions in the water. The scientific name is *limonite*.

CASTING SHED: Located at the bottom of the blast furnace, this was where molten iron was taken from the furnace. In the sandy floor the iron was cast into molds to make pot, pans, kettles, tools, and firebacks.

CAST IRON: Iron products made by pouring soft iron into a mold or trench to harden. It is more brittle than wrought iron so its uses are limited.

CHARCOAL: Wood that has been slowly burned in a dirt covered mound for 10-14 days. Charcoal is pure carbon and burns much hotter than wood. It is what iron workers used to process the iron.

COLLIER: A person who makes charcoal. This was a very skilled job.

FINER: A person who works in the forge or “finery”. This job required a lot of skill and training. It was also very dangerous.

FIREBACK: A large piece of cast iron that is placed in the back of a fireplace. It helps protect the bricks and radiate heat into the room. A few original Saugus firebacks still exist.

FLATS: Flattened merchant bars, which could be used as wheel rims, barrel hoops, or tools.

FLUX: A material added to separate impurities from the useable iron in the bog iron ore.

FORGE: Building where brittle cast (or pig) iron is transformed into stronger wrought iron. Here impurities are beaten out of the iron and its molecules are lined up straight.

GABBRO: Mined in Nahant, it was the calcium-rich flux used at Saugus Iron Works.

HEARTH: The part of a furnace or forge on which the fire rests.

INDENTURED SERVANT: A person bound by a contract to work for a specific length of time, commonly 7 years.

INVESTOR: A person who initially commits money to an enterprise in expectation of a profit in the end.

IRON MASTER: The person in charge of the iron works.

LIGHTER: A flat-bottomed boat that brought raw materials to the iron works and finished goods to the harbor. The Alewife and Eel are both Lighters.

MASTER: A very skilled person who teaches and trains others in a particular trade or skill.

MERCHANT BAR: Pure wrought iron, the main sales item of the Saugus Iron Works.

NAIL ROD: Merchant bars flattened and slit into thin rods from which nails were made.

PIG BAR: Term used to describe the large cast iron bars that had recently been drained from the blast furnace and were cooling in sand trenches.

PURITAN: During the 16th and 17th centuries, a person who wanted to “purify” or reform the Church of England and practiced a very rigorous moral code. Puritans made up a large number of the earliest Massachusetts settlers.

SLAG: Waste product from the blast furnace. It formed when the flux pulled impurities from the bog iron ore. The slag pile is the only original feature left from the original iron works.

SLITTING MILL: The building in which merchant bars were pressed into flat bars and slit into long thin rods.

WATER WHEEL: Powered the machinery here: bellows, power hammer, and gears.

WOODCUTTER: An unskilled position that involved the cutting of trees for charcoal.

WROUGHT IRON: Cast iron that has been heated and beaten with a hammer to remove impurities. The beating process also lines up the molecules inside the iron, making it strong and workable. A merchant bar is pure wrought iron.

